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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,397	01/17/2002	Scott B. Marovich	10003530-1	9611

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER	
ISMAIL, SHAWKI SAIF	
ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/051,397	<b>Applicant(s)</b> MAROVICH, SCOTT B.	
	<b>Examiner</b> Shawki S. Ismail	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 13 and 19 is/are allowed.  
6) ☒ Claim(s) 1-12, 14-18 and 20-25 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **RESPONSE TO AMENDMENT**

1. This communication is in response to the amendment and/or arguments received on June 13, 2006.

Claims 1-25 are pending.

### **Claim Rejections - 35 USC § 112**

2. The arguments relating to the 112 rejection made in the last office action mailed on March 13, 2006 have been fully considered and are persuasive. Examiner withdraws the previous rejection made under 112 for claims 1-19.

### **The Previous Rejection Maintained**

3. The 102 rejection is respectfully maintained as set forth in the last Office Action mailed on March 13, 2006. Applicants' arguments with respect to 1-25 have been fully considered but they are not persuasive and the previous rejection is maintained.

### **Claim Rejections - 35 USC §102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the

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requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1-12, 14-18, and 20-25, are rejected under 35 U.S.C. 102(e) as being anticipated by **Dietz et al.**, (Dietz) U.S. Patent No. **6,954,789**.

6. As to claim 1, Dietz teaches a network interface for processing incoming messages sent by a client device to a server, comprising:

a First-In-First-Out (FIFO) buffer (refer to Fig. 11) adapted to receive the incoming messages and to assemble the incoming messages from a serial to a parallel form (Dietz teaches parsing (serial to parallel conversion) a packet to create a parser record comprising a function of selected portions fo the packet.

a regular-expression pattern matching circuit connected to the FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with the assembly of the incoming messages from a serial to a parallel form, recognize Hypertext Transfer Protocol (HTTP) message headers embedded in the incoming messages, parse recognized HTTP message headers into parsed HTTP message headers, and provide the parsed HTTP message headers to the server (col. 5, lines 57-62, col. 6, lines 8-12, Dietz teaches a pattern matching engine)

7. As to claim 2, Dietz teaches the network interface as claimed in claim 1 further including: a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized HTTP message headers (col. 32, lines 38-46 and col. 34, lines 28-33).

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8. As to claim 3, Dietz teaches the network interface as claimed in claim 1 wherein: the regular-expression pattern matching circuit is further adapted to provide to the server the parsed HTTP message headers in a compact form (col. 18, lines 25-33).

9. As to claim 4, Dietz teaches the network interface as claimed in claim 1 wherein: the regular-expression pattern matching circuit is further adapted to provide to the server incoming messages that cannot be recognized by the regular-expression pattern matching circuit (col. 14, lines 44-53).

10. As to claim 5, Dietz teaches the network interface as claimed in claim 1 wherein: the regular-expression pattern matching circuit is implemented by a technique consisting of hardware, software, and a combination thereof (col. 11, lines 50-59).

11. As to claim 6, Dietz teaches the network interface as claimed in claim 1 wherein: the HTTP message headers include HTTP cookies (col. 14, lines 53-67).

12. Claims 7-12, 14-18 and 20-25 do not teach or define any new limitation above claims 1-6, therefore, they are rejected for similar reasons.

### Reasons For Allowance

13. The following is an Examiner's Statement of Reasons for Allowance:

Claims 13 and 19 are allowable over the prior art of record.

As to claims 13 and 19 the limitations are comprehensive in that all limitation of the other claims were presented. These limitations if taken

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separately or in combination are anticipated by prior art, however taken together they produce an environment for improving client/server system performance and quality of services of a network server by incorporating a network interface for processes incoming messages sent by a client device to a network server in a novel way. The examiner has found that the prior art of record does not teach or suggest or render obvious novel claims 13 and 19. Therefore, claims 13 and 19 are allowed.

### Response to Arguments

14. Applicant's arguments with respect to claims 1-12, 14-18, and 20-25 have been considered but are not deemed to be persuasive. Applicant argues in substance that:

(A) Argument: Dietz does not disclose a FIFO buffer.

Response: Dietz teaches that the analyzer subsystem includes a unified flow key buffer (UFKB) for receiving parts of packets from the parser subsystem and for storing signature in process. The UFKB record hold records of packets that are to be processed or that are in process. Three processing engines run concurrently and access records in the UFKB, the lookup/update engine (LUE), the state processor, and the flow insertion and deletion engine (FIDE). Conventionally a buffer operates in a FIFO manner such that processing requests received in a large amount can be accepted while allowing the processor to function within its capabilities. Therefore, Dietz's UFKB buffer meets the scope of the claimed limitation.

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(B) Argument: Dietz does not disclose a regular-expression pattern matching circuit connected to the FIFO buffer.

Response: The parsing subsystem comprises two sub-parts, the pattern analysis and recognition engine (PRE), and an extraction engine. The PRE interprets each packet, and in particular, interprets individual fields in each packet according to a pattern database. The analyzer subsystem includes a unified flow key buffer (UFKB) for receiving parts of packets from the parser subsystem and for storing signature in process. Therefore, Dietz meets the scope of the claimed limitation a "regular-expression pattern matching circuit connected to the FIFO buffer".

After the above clarification, it should be evident that at the very least all limitations contained within the independent claims are thoroughly disclosed by Dietz. Therefore, all claims including the dependent should be carefully reviewed in view of the above clarifications.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawki S Ismail whose telephone number is 571-272-3985. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shawki Ismail  
Patent Examiner  
October 2, 2006



SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER